# **AUDREY MOHAN, PH.D.**

#### **CONTACT INFORMATION**

5415 Mark Dabling Blvd. Tel: 512-296-3111 Colorado Springs, CO 80918 Email: amohan@bscs.org

#### **EDUCATION**

Texas State University, San Marcos, TX. Ph.D. May 2009

Department of Geography; Major field: Geographic Education.

Dissertation: Teacher efficacy in geography: A mixed methods study of

formal and informal teacher education. Chair: Professor Richard G. Boehm

Jesse H. Jones Distinguished Chair in Geographic Education

Texas State University, San Marcos, TX February 2004

**College of Education** 

Teacher Certification: History 8-12, Special Education EC-12

University of Texas, Austin, TX M.Ed. December 2003

College of Education Special Education

University of Notre Dame, South Bend, IN B.A. May 2002

College of Arts and Letters

History

#### PROFESSIONAL APPOINTMENTS

### BSCS Science Learning 2012 – Present

Research Scientist

Works on the design and development of curriculum materials and teacher professional development in science and geography. Conducts research and evaluation work on teacher education programs in science and student learning as a result of research-based instructional materials and effective teaching.

# Office of Teaching and Learning University of Denver

2012 - 2013

October 2019

Associate Director

Coordinated the development of hybrid courses in introductory courses by working with faculty to design online course components and collecting feedback from students on their experiences in hybrid courses. Worked with OTL staff to provide services to faculty members seeking to improve their teaching, with an emphasis on online course development.

# Committee on Professional Development and Instructional Materials, Geography Roadmap Project

2011 - 2013

Research Director

Coordinated research and writing for the Committee on Professional Development and Instructional Materials. The final report from this committee will have national impact on the design and evaluation of instructional materials and professional development in the K-12 geography to improve student learning, teacher learning, and articulation with post-secondary education.

### Department of Interdisciplinary Learning and Teaching University of Texas – San Antonio

2009 - 2011

Assistant Professor

Investigated teacher efficacy and effectiveness in teaching geography, social studies, and environmental science and development of pedagogical content knowledge for teachers. This position included teaching undergraduate and graduate courses, academic advising of master and doctoral students, service to the department and college, and academic scholarship through research and writing.

### **Grosvenor Center for Geographic Education**

2008 - 2009

Graduate Research Assistant

Conducted research on topics within geography education and applied geography. Major work included *Geography: Teaching with the Stars*, a national, multi-organizational project that provides professional development to teachers on geography and environmental topics using video and multimedia resources.

# National Geographic Society, Education and Children's Programs

2007 - 2008

Grosvenor Scholar

Conducted research for National Geographic Society on national educational policy and funding, teacher preparedness and effectiveness, and geography education outreach. Reviewed curriculum and education programs, worked with the National Geographic's Geography Alliance Network on implementing grant requirements and policy initiatives, and monitored state and national changes in K-12 geography teaching and learning.

#### **Texas State University - San Marcos**

2005 - 2007

Research Assistantship, Grosvenor Center for Geographic Education

#### Burnet High School, Burnet, TX

2002 - 2005

High School Social Studies and Special Education Teacher

#### **TEACHING EXPERIENCE**

# University Level Teaching (Texas State University-San Marcos, University of Texas at San Antonio):

2005-2011

Graduate Level Courses:

C&I 6673 Education Policy and Critical Issues in Teaching (Online)

C&I 6303 Advanced Methods in Social Studies (F2F, Hybrid)

C&I 5003 Theory in Curriculum and Instruction (F2F, Hybrid)

*Undergraduate Level Courses:* 

IDS 3003 – Science and Humanity (F2F, Online)

C&I 4203 - Models for Teaching Secondary Social Studies (F2F, Hybrid)

GEO 3301 - Quantitative Methods (F2F in lab setting)

GEO 1310 - World Regional Geography (F2F, large lecture)

#### **University Level Teaching Assistant (University of North Texas):**

Graduate Level Courses (all online):

EPSY - Theories of Learning as Applied to Exceptional Populations

EDSP 5321 - Authentic Assessment

EDSP 5720 - Analysis of Research in Special Education

*Undergraduate Level Courses (all online):* 

EDSP 3210 - Educational Aspects of Exceptional Learners

**K-12 Teaching:** 2002-2005

Burnet High School, Burnet CISD, Burnet, TX

Grades: 9-12 Social Studies and Special Education

Subjects: World Geography, Pre-AP World Geography, Government,

AP Government, Economics, AP Economics, and all subjects in special education

setting

#### PRODUCTS AND PUBLICATIONS

BSCS. (2017). *Guidelines for the evaluation of instructional materials in science*. Colorado Springs: Author. Retrieved from: <a href="http://guidelinesummit.bscs.org/sites/default/files/BSCS\_NGAL\_2017.pdf">http://guidelinesummit.bscs.org/sites/default/files/BSCS\_NGAL\_2017.pdf</a> [Lead Writer]

**Mohan, A.**, & Mohan, L. (2016). Spatial thinking with maps: Grades 6-12. National Geographic Education Foundation. Report prepared for National Geographic Education Programs.

**Mohan, A.**, & Mohan, L. (2016). *Spatial thinking with maps: Development of concepts and skills from G6-12.*Report prepared for National Geographic Education Programs.

**Mohan, A.**, & Mohan, L. (2014). Spatial thinking through the elementary years. *Social Studies Review*, 52-59.

**Mohan, A.**, & Mohan, L. (2013). *Spatial thinking about maps: Development of concepts and skills across the early school years*. Report prepared for National Geographic Education Programs.

Battersby, S., **Mohan, A.,** Cooper, C., Curtis, M., Lane, J., Tabor, L., & Wessell, J. (2013). What supports or promotes the development of geographic knowledge, skills, and practices? *Research in Geographic Education*, *15*(2), 29-43.

Schell, E. M., Roth, K. J., & **Mohan, A**. (Eds.). (2013). *A road map for 21st century geography education: Instructional materials and professional development* (A report from the Instructional Materials and Professional Development Committee of the Road Map for 21st Century Geography Education Project). Washington, DC: National Council for Geographic Education.

Boehm, R. G., Brysch, C.P., **Mohan, A.** & Backler, A. (2012). A new pathway: Video-based professional development in geography. *Journal of Geography*, *111*(2), 41-53.

Boehm, R.G., & **Mohan, A.** (2009). Geospatial technology: Curricular keystone of applied geography. *International Journal of Applied Geospatial Research*, *1*(1), 26-34.

Bednarz, S., Chalkley, B., Fletcher, S., Hay, I., Le Heron, E., **Mohan, A.**, & Trafford, J. (2008). Community engagement for student learning in geography. *Journal of Geography in Higher Education*, *32*(1), 87-100.

Boehm, R., & **Mohan, A**. (2007). On the education of an applied geographer. In *Papers and Proceedings of the Applied Geography Conference*, 30.

Boehm, R., & **Mohan, A**. (2006). Defining a core curriculum in applied geography. In *Papers and Proceedings of the Applied Geography Conference*, 29.

**Mohan, A.**, & Warren, M. (2006). The cohort model: A case study of one North American doctoral program in geographic education. In *Papers of the Commission on Geographic Education of the International Geographical Union.* 

Books and Book Chapters:

Mohan, L., **Mohan, A.,** & Uttal, D. (2015). Research on thinking and learning with maps and geospatial technology. In Solem, M.N., Huynh, N.T., & Boehm, R.G. (Eds.), *Learning progressions for maps, geospatial technology, and spatial thinking: A research handbook.* Newcastle upon Tyne: Cambridge Scholars Publishing.

- Theobald, R., Dixon, S., **Mohan, A.**, & Z. Moore. (2015). National study of the state of social studies teacher survey: Perspectives on geography teachers. In Jeff Passe & Paul G. Fitchett (Eds.) *Research on the status of social studies: Views from the field.* Charlotte, NC: Information Age.
- **Mohan, A.**, & Boehm, R.G. (2009). Geography Education in the United States. A chapter in a special edition of *Research in Geographic Education*, ed. O. Muniz. San Marcos, TX: Grosvenor Center for Geographic Education.
- Boehm, R.G., & **Mohan, A**. (2009). Geography Education and Early Career Professionals. A chapter in a special edition of *Research in Geographic Education*, ed. O. Muniz. San Marcos, TX: Grosvenor Center for Geographic Education.
- Boehm, R.G., & **Mohan, A**. (2008). Defining a core curriculum in applied geography. A chapter in *Applied Geography for the Entrepreneurial University*, eds. A. Bailly and L.J. Gibson. Norwell, MA: Kluwer Academic Publishers.

In Preparation or Under Review:

Mohan, A. (In preparation). Expanding Worldviews. Journal of Geography in Higher Education.

**Mohan, A**. (In preparation). Teaching geography: The role of formal and informal education experiences and teacher efficacy. *Journal of Geography*.

#### **SELECTED PRESENTATIONS**

**Mohan, A.**, Mohan, L., Marsh, M., & Shin, E. October 2014. Spatial Thinking Panel Session. Workshop funded by the Association of American Geographers, National Geographic Society, and National Science Foundation, Washington, DC.

**Mohan, A.** (co-presenter). Geography Road Map Project panel sessions and workshops series focused on the design of K-12 instructional materials and teacher education:

February 2014: Webinar for National Council for Geographic Education, online

November 2013: National Council for Social Studies and College and University Faculty Assembly, St. Louis, MO

August 2013: National Council for Geographic Education, Denver, CO

April 2013: Association of American Geographers, Los Angeles, CA

February 2013: Webinar for National Council for Geographic Education, online

October 2012: National Council for Geographic Education, San Marcos, TX

February 2012: Association of American Geographers, New York, NY

- **Mohan, A.** May 2011. *Expanding Worldviews.* Invited presentation at the Grosvenor Center for Geographic Education Bi-Annual Conference for Early Career Scholars. Lafayette, LA.
- **Mohan, A.** November 2010. *Aligning the 2010 Geography TEKS to Social Studies CCRS and 2011 National Geography Standards.* Invited workshop as part of the College and Career Readiness Initiative, University of Texas at Arlington.
- **Mohan, A.** September 2010. *Sustainable Ecosystems, Enduring Cultures (SEEC) Ecuador.* Workshop presented at the National Conference on Geography Education, Savannah, Georgia.
- **Mohan, A.** July 2010. *Understanding teacher knowledge, interest, and efficacy in geography.* Paper presented at the Regional Congress of the International Geographical Union, Tel Aviv, Israel.
- **Mohan, A.** May 2010. *Teaching geography: The role of formal and informal education experiences and teacher efficacy.* Paper presented at the annual meeting of the American Education Research Association, Denver.
- **Mohan, A.** April 2010. *Geography's place within social studies: Teacher knowledge, attitudes, and choice.*Paper presented at the annual meeting for the Association of American Geographers, Washington, D.C.
- **Mohan, A.** February 2009. *Teaching Modern Africa*. Workshop for middle school and secondary social studies teachers requested by Austin Independent School District.
- **Mohan, A**. August 2008. *Measuring geography teacher self-efficacy: Directions for new research.* Paper presented at the meeting of the International Geographic Congress, Tunis, Tunisia.

**Mohan, A**. May 2007. *Geography teacher preparation: Preliminary results from focus groups.* Paper presented at the meeting of the Geography in the Americas Conference, La Serena, Chile.

Boehm, R. and **Mohan, A**. July 2006. *Defining a core curriculum in applied geography*. Paper presented at the meeting of the International Geographical Congress, Brisbane, Australia.

#### **GRANTS FUNDED**

Mohan, A., Co-Principal Investigator. (2014-2016). *Developing Consensus Guidelines for Tools and Processes that Assess Science Instructional Materials.* Award Amount: \$298,696; Funding Agency: National Science Foundation.

Mohan, A., Principal Investigator. (2010). *Sustainable Ecosystems, Enduring Cultures (SEEC) Ecuador*. A Fulbright-Hays Group Project Abroad to study geography, history, culture, sustainability, environmental stewardship, biodiversity, and human impact on ecosystems. Award amount: \$84, 268; Funding Agency: U.S. Department of Education.

#### **CURRICULUM DEVELOPMENT AND REVIEW**

SeaPerch/RoboNation. (2018). Exploring big data: A unit on big data analysis for high school students. Funded by the Office of Naval Research. Lead Author.

Mohan, A. (2008). Sustainable Economics: Managing Earth's Resources. Economics unit developed for 12<sup>th</sup> grade students on economic principles and environmental sustainability. Supported by the California Education and Environment Initiative.

Mohan, A. (2008). World Geography: Year-long world geography curriculum for ninth grade geography classrooms. Supported by the Texas Educational Agency.

#### PROFESSIONAL SERVICE

FROFESSIONAL SERVICE	
Chair, Geography Education National Implementation Project	2017 - Present
Board of Directors, (President, 2018)  National Council for Geographic Education	2016-Present
Vice President, Research Committee National Council for Geographic Education	2015
Member, Natoli Dissertation Award Committee National Council for Geographic Education	2013- 2015
Member, Strategic Planning Committee National Council for Geographic Education	2012-2015
Member, Research Committee National Council for Geographic Education	2011-2014
Content Expert for Texas End-of-Course World Geography Exams  Texas Education Agency	2009- 2012
Member, Subcommittee for the Award for Global Understanding National Council for Social Studies	2009- 2012
Member: Secondary Teacher Education Committee, Curriculum and Instruction Subcommittee, Teacher Education Advisory Committee  Department of Interdisciplinary Learning and Teaching, UTSA	2009-2011

Reviewer for: Research in Geographic Education, Journal of Geography in Higher Education, Journal of Geography, Geography for Life, National Geography Standards

#### **MEMBERSHIPS**

National Science Teachers Association National Council for Geographic Education Association of American Geographers Society of Women Geographers National Council for Social Studies College and University Faculty Assembly

#### **SELECTED AWARDS & HONORS**

IGU Junior Scholar Travel Grant

Association of American Geographers-National Science Foundation

2013, 2012, 2010, 2008, 2006

Salvatore J. Natoli Dissertation Award

National Council for Geographic Education

2011

Sally Ann Karnau Geography Dissertation Research Scholarship 2008 & 2007

#### REFERENCES

#### Dr. Daniel C. Edelson

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